Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 2 and 95 of	)	ET Docket No. 99-255
the Commission's Rules to Create a	)	
Wireless Medical Telemetry Service	)	

To: The Commission

COMMENTS
OF
THE PERSONAL COMMUNICATIONS INDUSTRY ASSOCIATION, INC.

The Personal Communications Industry Association, Inc. ("PCIA"),[1] through counsel and pursuant to Section 1.415 of the Commission's Rules, 47 C.F.R. § 1.415, hereby respectfully submits its Comments in response to the Notice of Proposed Rulemaking ("NPRM") in the above-captioned proceeding.[2]

[1]PCIA is an international trade association representing the interests of both commercial and private users and businesses involved in all facets of the personal communications industry. PCIA's Federation of Councils include: the Paging and Messaging Alliance, the PCS Alliance, the Wireless Broadband Alliance, the Mobile Wireless Communications Alliance, the Site Owners and Managers Association, and the Private System Users Alliance. In addition, PCIA is the FCC-appointed frequency coordinator for the Business Radio Service, the 800 and 900 MHz Business Pools, 800 MHz General Category frequencies, and for the 929 MHz paging frequencies.

[2]64 FR 41891 (August 2, 1999).

I. BACKGROUND

In this proceeding, the Commission seeks to find a permanent home for wireless medical telemetry devices, which have operated on a secondary basis in a variety of frequency bands for several years. The Commission recognizes the danger in permitting these devices to operate, particularly on an unlicensed basis, in the midst of land mobile radio devices which may operate at any place at any time.

The Commission is now seeking comments on permanent allocations of spectrum for medical telemetry equipment in the 608-614 MHz, 1385-1390 MHz and 1432-1435 MHz bands. Further, the Commission proposed to permit a two year transition period to the new frequencies, and the Commission has asked for comments on implementing a coordination system for the service.

II. COMMENTS

A. The Commission Must Expedite The Creation Of The New Service

The single most critical impediment to increased efficiency in the crowded 450-470 MHz band is the removal of wireless medical telemetry devices from this band. Despite being allocated on a secondary basis and warnings from associations (including PCIA) to inform the land mobile community of the location of these devices, they have proliferated to such an extent that a potential now exists to jeopardize public health. The Land Mobile Communications Council ("LMCC") recognized this problem in its Low Power Pool Plan that was submitted in June of 1997 at the Commission's request.[3]

---

[3]The American Hospital Association ("AHA") Report referenced in the Commission's Notice of Proposed Rulemaking states at page 6 that "... coordinators have been reluctant to designate any channels specifically for low power use due to the uncertainty surrounding consolidation of the PLMR Services; the effort to reach a consensus has therefore failed....." Actually, nothing could be

PCIA urges the Commission to complete this proceeding on an accelerated basis in order to protect medical telemetry devices. As it has said in the past in FCC filings and at FCC meetings concerning this issue, PCIA will assist in any way possible to ensure the rapid completion of this proceeding and transition of medical telemetry systems out of the 450 MHz band. PCIA has already offered its assistance in the form of: (1) contacting medical facilities to determine actual usage; (2) assembly of a database consisting of medical facilities and frequencies utilized; and (3) preparation of journal articles and lectures to educate the healthcare industry on the FCC's rule changes. PCIA reiterates herein its continued commitment to this task.[4]

B. <u>The Healthcare Industry Must Adequately Demonstrate Its Need For 12 MHz Of Spectrum</u>

It is important that the healthcare industry adequately demonstrate a need for 12 MHz of spectrum. It is extremely difficult to believe that such an enormous amount of spectrum(the breadth

---

further from the truth. LMCC filed its Low Power Pool plan on June 4, 1997, a full two months before the date upon which the Commission requested the document. Further, LMCC invited Hewlett-Packard (HP), maker of such devices, to participate in the effort. However, HP's sole response was to demand that 6 MHz of spectrum be set aside in the 450 MHz band for medical telemetry devices, an obviously impossible demand to meet. Thus, the LMCC Plan represented a consensus of ALL land mobile radio users that chose to participate in a meaningful manner.

[4]PCIA notes that the AHA report states that frequency coordinators were unable to develop a consensus plan "... largely because of the extreme difficulty of developing a coordination procedure that can reasonably protect lower power operations such as biomedical telemetry from interference from higher powered mobile operations within the same geographic area. As discussed in Section V below, the Task Force does not believe that such coordination will be effective." AHA Report at n. 16. However, the frequency coordinators have had no such difficulty. The LMCC Low Power Task Force has already developed and implemented procedures to protect licensed low power devices from co-channel interference. Further, PCIA (and PCIA presumes others) has offered to work with AHA on several occasions to develop such coordination procedures. Additionally, the only further "discussion" in Section V of the Task Force Report is footnote 49, where the Task Force states that it <u>assumes</u> that coordinators will be unable to develop and/or implement co by the medical telemetry industry ordination procedures. There is no basis presented for this "assumption", and no reason to believe that such an effort cannot be successful, if attempted.

of two television channels) is necessary in even the most urban areas. The AHA Report is based upon survey results from a mere fourteen facilities, primarily the largest in the nation.[5] This amount of empirical information cannot be the exclusive basis for an allocation of such a tremendous amount of spectrum. The alleged current needs (6.125 MHz) are based upon the concurrent use at a single facility of 1750 units. While it may be true that at the largest institutions this many devices will be used at the same time, PCIA believes that there has been an inadequate demonstration of this need sufficient to warrant a nationwide allocation of double the spectrum allegedly required today at the largest institutions.

There are two alternatives which would make a 12 MHz allocation of spectrum more palatable to both the Commission and the land mobile industry. First, the best allocation is made from spectrum that is already assigned on a primary basis to a compatible user, and therefore the spectrum is not available for other use. The TV Channel 37 allocation meets this criteria. For spectrum which the Commission proposes for medical telemetry use which has already been targeted for use by private radio systems, PCIA believes that a system can easily be created where wireless medical telemetry can share spectrum with other land mobile devices. Unlike the present allocation in the 450 MHz band, a system of coordination of medical telemetry devices and other wireless devices can easily prevent interference and allow all types of devices to proliferate.

A successful shared use of spectrum never had an opportunity in the 450 MHz band, as the wireless medical telemetry devices were put on frequencies which were already heavily crowded

---

[5]While a copy of the questionnaire is provided, the responses from the facilities are not. Therefore, it must be assumed that AHA used the response of the facility with the largest need, not an average, upon which to base its determination of need.

with wireless devices with no fixed location while medical telemetry devices were not licensed. However, there is no reason why virgin spectrum cannot be utilized in a way to prevent a large amount of spectrum from laying fallow in those areas where there are no huge medical facilities.

C. PCIA Is Ideally Suited To Serve As A Coordinator

PCIA agrees with the Commission's recommendation that the new service be unlicensed, but coordinated. There is little value in making hospital facilities license these devices. However, to ensure full spectrum utilization and minimalization of interference, a centralized database containing information regarding where the devices are being used and which frequencies are being utilized should be created.

PCIA is fully capable of performing this task. In addition to already serving as a coordinator for frequencies requiring licensing, PCIA also serves as a database manager and coordinator for several wireless ventures which do not necessarily lead to the issuance of a license by the Commission.

1. LifePage Program - PCIA already works with many of the medical facilities which utilize wireless medical telemetry devices. PCIA's LifePage program provides free pagers and paging service to patients awaiting vital organ transplants. LifePage allows individuals the freedom to lead productive, active lives, knowing that they can be reached by their transplant coordinator, anytime, anywhere. By carrying a LifePage pager, the patient can remain in constant contact with their doctors without having to be near their telephones at all times. Since its inception in 1983, the LifePage program, in partnership with medical facilities nationwide, has provided the use of more than 80,000 pagers to hopeful transplant candidates nationwide. Of the more than 64,000 people presently registered on the national organ transplant waiting list, approximately 40% are currently participating in the LifePage program.

2. Microwave Relocation Clearinghouse - In addition to its work with medical facilities, PCIA has served since 1996 as a clearinghouse for the relocation of microwave systems. The PCIA Microwave Clearinghouse has registered more than 2,000 relocated links and thousands of base stations. PCIA, working with the PCS industry, developed the cost-sharing concept for the relocation of microwave links after the Federal Communication Commission made spectrum available for PCS carriers and ordered that existing microwave systems operating in the 2GHz band be

relocated to operate under another band. PCIA's efforts in maintaining a database and facilitating the relocation of microwave systems is similar to the effort which must be accomplished in the 450 MHz band with the relocation of wireless medical devices.

3. FLEX™ Code Administration - PCIA also administers the FLEX™ Code Coordination program on a world-wide basis. FLEX™, created by Motorola, is a family of paging technologies that expands beyond other paging protocols in speed, reliability and capacity. PCIA developed the proprietary software that allows for the assignment of billions of roaming codes to be assigned, ensuring true global roaming capability.

As a trade association representing users and carriers, presently working with medical facilities and already providing a variety of database management functions, PCIA is best able to perform the functions required for the successful relocation of wireless medical devices out of the 450 MHz and into other designated spectrum while ensuring non-interference for these devices. PCIA can perform the engineering and database management functions to ensure a smooth transition. PCIA again reiterates its commitment to making this process work for everyone.

D. The Transition Period Must Be Brief

PCIA believes that the transition out of the 450 MHz band can be much shorter than the five years recommended by AHA. In fact, PCIA believes that certain aspects of the Commission's two-year transition proposal can be accelerated. First, five years is clearly unnecessary. TV Channel 37 has been available for wireless medical telemetry use and equipment is readily available. The need to clear the 450 MHz band has been known to medical telemetry users for several years and such users have therefore had a significant "head-start" to begin to move to Channel 37. Further, AHA specifically targeted the 1385-1390 MHz and 1432-1435 MHz bands because "there are already

multiple component vendors available with off-the-shelf parts, facilitating the early introduction of devices operating in these bands."[6]

The Commission should be mindful of its experience with the creation of the Emergency Medical Radio Service ("EMRS"). Hospitals utilizing 450 MHz Special Emergency Radio Service ("SERS") channels for paging systems were given five years to vacant those channels or request a waiver of the rules to remain. Virtually no medical facilities made the transition, or requested a waiver, until a massive undertaking by PCIA to remind every licensed medical facility that only six months remained in the transition period. Even then, less than fifty percent of the licensed facilities have ever complied with the Commission's mandate.

The failure to properly transition the SERS frequencies is not a failure by medical facilities. It is symptomatic of radio users in general. For these users, unlike carriers, radio is not their business and not their focus day-in and day-out. The most successful transitions for users are those transitions for which there is adequate equipment available on a date certain and with adequate notice to users. For this reason, PCIA has long supported a date certain for mandatory migration of 450 MHz wide-band systems to narrowband equipment. Similar action must be taken with regard to transitioning wireless medical telemetry devices out of the 450 MHz band. Medical facilities must not have the option of remaining on their existing channels, even on a secondary basis. If this were to be permitted, the Commission would find few facilities transitioning at all, except when an entire

[6]AHA Report at 13.

system had to be replaced. Therefore, PCIA supports the Commission's two year proposal, with the understanding that all medical telemetry devices must be removed from the 450 MHz band.[7]

In addition, the Commission need not wait two years to begin the transition task. Wireless medical telemetry devices are only permitted in the upper portion of the 450 MHz band, i.e. 460-470 MHz (with the exception of four individual frequencies). PCIA believes that the Commission can and should immediately make available the 450-460 MHz offset frequencies for high power operation. Further, if selected as a frequency coordinator to manage the transition process, PCIA will work with the medical telemetry community to immediately begin identification and location of medical telemetry devices in the 460-470 MHz band. By creation of the database, PCIA believes that implementation of high power systems in the 460-470 MHz can begin by coordinating around existing medical telemetry systems.[8]

---

[7]To the extent that interference protection parameters can be developed to protect wireless medical telemetry devices, and to the extent that medical facilities are willing to license such devices, it is certainly possible that medical telemetry devices could remain in the band permanently and transition to the 450 MHz frequencies set aside pursuant to the LMCC Low Power Pool Proposal for low power devices. For new medical telemetry users that are unwilling to accept such licensing parameters, the Commission should immediately restrict any further utilization of 450 MHz spectrum.

[8]PCIA pledges (as it has in the past) to work with the medical telemetry community to develop sufficient co-channel protection parameters. Further, creation of the database will actually lead to a faster transition, as applicants seeking to implement high power systems on the channels will have the opportunity to negotiate with medical facilities to move the system to the new band(s). This has the potential to aid the transition by allowing medical facilities to move earlier than otherwise might have been the case because of monetary concerns.

III. CONCLUSION

PCIA requests that the Commission make an allocation of spectrum for primary use for wireless medical telemetry devices. The allocation should be based upon the actual needs demonstrated for such devices, and the Commission should permit a two year transition period for users in the 450-470 MHz band. The Commission should also immediately approve the LMCC Low Power Pool proposal, including the proposals for 20 watt, 75 foot antenna frequencies, and immediately begin the seven month transition period for low power systems in the 450-460 MHz band. PCIA requests that it be considered to be designated the coordinator for the transition, and that it be permitted to develop a 460-470 MHz medical telemetry database for the purpose of coordinating high power mobile users around existing medical telemetry users.

WHEREFORE, the premises considered, it is respectfully requested that the Commission act in accordance with the views expressed herein.

Respectfully submitted,

PERSONAL COMMUNICATIONS
INDUSTRY ASSOCIATION

By: 
Mary McDermott, Senior Vice President
Chief of Staff, Government Relations

500 Montgomery Street, Suite 700
Alexandria, Virginia 22314
(703) 739-0300

OF COUNSEL:
Alan S. Tilles, Esquire
David E. Weisman, Esquire
Shulman, Rogers, Gandal, Pordy & Ecker, P.A.
11921 Rockville Pike, Third Floor
Rockville, Maryland 20852-2743

Date: September 16, 1999